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NEWS
                 Web Page for STN Seminar Schedule - N. America
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      2 AUG 06 CAS REGISTRY enhanced with new experimental property tags
         AUG 06
NEWS 3
                 FSTA enhanced with new thesaurus edition
NEWS 4
         AUG 13
                 CA/CAplus enhanced with additional kind codes for granted
                 patents
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         AUG 20
                 CA/CAplus enhanced with CAS indexing in pre-1907 records
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         AUG 27
                 Full-text patent databases enhanced with predefined
                 patent family display formats from INPADOCDB
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         AUG 27
                 USPATOLD now available on STN
NEWS
         AUG 28 CAS REGISTRY enhanced with additional experimental
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                 spectral property data
NEWS 9
         SEP 07
                 STN AnaVist, Version 2.0, now available with Derwent
                 World Patents Index
NEWS 10 SEP 13 FORIS renamed to SOFIS
NEWS 11 SEP 13 INPADOCDB enhanced with monthly SDI frequency
NEWS 12 SEP 17
                 CA/CAplus enhanced with printed CA page images from
                 1967-1998
NEWS 13
         SEP 17 CAplus coverage extended to include traditional medicine
                 patents
NEWS 14 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15 OCT 02 CA/Caplus enhanced with pre-1907 records from Chemisches
                 Zentralblatt
NEWS 16 OCT 19 BEILSTEIN updated with new compounds
NEWS 17 NOV 15 Derwent Indian patent publication number format enhanced
NEWS 18 NOV 19 WPIX enhanced with XML display format
NEWS 19 NOV 30 ICSD reloaded with enhancements
NEWS 20 DEC 04 LINPADOCDB now available on STN
NEWS 21 DEC 14 BEILSTEIN pricing structure to change
NEWS 22 DEC 17 USPATOLD added to additional database clusters
NEWS 23 DEC 17 IMSDRUGCONF removed from database clusters and STN
NEWS 24 DEC 17 DGENE now includes more than 10 million sequences
NEWS 25 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in
                 MEDLINE segment
NEWS 26
         DEC 17
                MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27
         DEC 17
                 CA/CAplus enhanced with new custom IPC display formats
NEWS 28
         DEC 17
                 STN Viewer enhanced with full-text patent content
                 from USPATOLD
NEWS 29
         JAN 02
                 STN pricing information for 2008 now available
NEWS 30
         JAN 16
                 CAS patent coverage enhanced to include exemplified
                 prophetic substances
NEWS 31 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new
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custom IPC display formats

NEWS 32 JAN 28 MARPAT searching enhanced

NEWS 33 JAN 28 USGENE now provides USPTO sequence data within 3 days of publication

NEWS 34 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment

NEWS 35 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements

NEWS 36 FEB 08 STN Express, Version 8.3, now available

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability

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NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:00:26 ON 14 FEB 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 13 FEB 2008 HIGHEST RN 1003293-96-6
DICTIONARY FILE UPDATES: 13 FEB 2008 HIGHEST RN 1003293-96-6

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ring nodes :
1 2 3 4 5 6 7 8 9 10 11 16 17 18
chain bonds :
4-13 9-12 12-13 12-15 13-14
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-11 6-18 7-8

 $1-2 \quad 1-5 \quad 2-3 \quad 3-4 \quad 4-5 \quad 6-7 \quad 6-11 \quad 6-18 \quad 7-8 \quad 7-16 \quad 8-9 \quad 9-10 \quad 10-11 \quad 16-17 \quad 17-18$

G1:0, S, N, NH

G2:CH2,CH,CF2,CF3

G3:CH2, CF2, CF3, SO2, SO3H, S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS L1 STR

G1 O, S, N, NH

G2 CH2, CH, CF2, CF3

G3 CH2, CF2, CF3, SO2, SO3H, S

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SEARCH INITIATED 11:00:48 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

9 ITERATIONS 100.0% PROCESSED 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE**

PROJECTED ITERATIONS: 9 TO 360 PROJECTED ANSWERS: 0 TO

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FULL SEARCH INITIATED 11:00:55 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 161 TO ITERATE

100.0% PROCESSED 161 ITERATIONS 7 ANSWERS

SEARCH TIME: 00.00.01

7 SEA SSS FUL L1 L3

=> FIL HCAPLUS

SINCE FILE TOTAL ENTRY SESSION 178.36 178.57 COST IN U.S. DOLLARS

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 11:01:00 ON 14 FEB 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 14 Feb 2008 VOL 148 ISS 7 FILE LAST UPDATED: 13 Feb 2008 (20080213/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L45 L3

=> s 14 and py<=2003

23976331 PY<=2003

L5 5 L4 AND PY<=2003

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L4 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2864 HCAPLUS

DOCUMENT NUMBER: 140:59935

TITLE: Preparation of crystalline (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-

(carboxymethylamino)-1(pyrrolidinocarbonyl)-ethyl)-

benzimidazole esters and/or salts for use as

antithrombotic agents

INVENTOR(S): Linz, Guenter; Sieger, Peter; Schreiner, Gunnar; Rall,

Werner; Schmid, Rolf

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma Gmbh & Co. Kg, Germany

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	ΕC	C, EE	, ES,	FΙ,	GB,	GD,	GE,	GH,
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OTHER SOURCE(S): MARPAT 140:59935

AB The invention relates to the crystalline forms of compds. (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)-ethyl)-benzimidazole and monohydrochloride thereof, to methods for the production thereof, and to their use as medicaments having an antithrombotic action (no data). Thus, <math>(R)-2-(4-amidinophenylaminomethyl)

cyanophenylaminomethyl)-1-methyl-5-[1-amino-1-(pyrrolidineocarbonyl)-ethyl]benzimidazole was simultaneously N-alkylated and CN-reduced/aminated using BrCH2C(0)OCH2CH2CH3 in N-methylpyyolidinone, Pr acetate, and diisopropyethylamine; the resulting ester product was first isolated as the hydrochloride, and then as the 4-toluenesulfonic acid salt, which was deesterified to give the free base. The Et ester was similarly prepared Crystal structure data were given for the free base and the monohydrochloride forms.

IT 253797-00-1

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation and x-ray crystallog. structure of 2-(4-amidinophenylaminomethyl))-1-methyl-5-(1-(carboxymethylamino)benzimidaz ole esters and/or salts for use as antithrombotic agents)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2693 HCAPLUS

DOCUMENT NUMBER: 140:53413

TITLE: Benzimidazole derivatives for the treatment of

systemic inflammatory response syndrome

INVENTOR(S): Ries, Uwe; Wienen, Wolfgang; Schuly, Uwe

PATENT ASSIGNEE(S): Boehringer Ingelheim, Germany

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE	
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WO 2004	0003	10		A1		2003	1231	,	WO 2	003-	EP63	18		2	0030	616
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	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	ΝI,	NO,	NΖ,	OM,
	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,
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AU	20032789	45		A1		2004	0106		AU 2	2003-	2789	45		2	0030	616
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JP	20065146	03		Τ		2006	0511	1	JP 2	2004-	5147	27		2	0030	616
AT	365038			T		2007	0715		AT 2	2003-	7402	55		2	0030	616
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								,	WO 2	2003-	EP63	18		W 2	0030	616

OTHER SOURCE(S): MARPAT 140:53413

AΒ The invention discloses the use of benzimidazole derivs. for producing a medicament used for treating the systemic inflammatory response syndrome and particularly sepsis. Preparation of (R)-2-(4-amidinophenylaminomethyl)-1methyl-5-[1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)ethyl]benzimidazol e hydrochloride is described.

ΙT 253797-00-1P

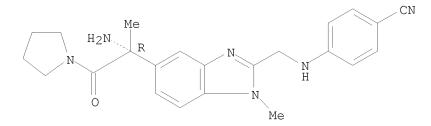
> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(benzimidazole derivs. for treatment of systemic inflammatory response syndrome)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS 6 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

2001:467997 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 135:61338

TITLE: Preparation of 2-(4-amidinophenylaminomethyl)benzimida

zoles as antithrombotics

Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, INVENTOR(S):

Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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	CA	2393	916			A1		2001	0705		CA	2000-	-2393	916		2	0001	216
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OTHER SOURCE(S): MARPAT 135:61338

GΙ

AB Title compds. [I; R1 = alkyl, fluoroalkyl, pyrrolidinocarbonylalkyl, 2,5-dihydropyrrolocarbonylalkyl, aminoalkyl, etc., R2 = alkyl; R3 = carbamidoyl, cyano, (substituted) oxadiazolyl, etc.] and stereoisomerics thereof were prepared .Thus, (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(ethoxycarbonylmethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl] benzimidazole dihydrochloride in H2O was stirred with NaOH for 45 min. at room temperature followed by addition of HCl up to pH = 3.5 to give 100% (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl]benzimidazole dihydrochloride. Several I extended (doubled) the activated partial thromboplastin time (aPTT) with ED200 = 0.12-0.22 $\mu \rm M$.

IT 253797-00-1P 345957-57-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of amidinophenylaminomethylbenzimidazoles as antithrombotics)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 345957-57-5 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:34881 HCAPLUS

DOCUMENT NUMBER: 132:78556

TITLE: Preparation of amidinophenylaminomethylenzimidazoles

as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke,

Henning; Nar, Herbert; Stassen, Jean Marie; Wienen,

Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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	2001		07		B1 A1		2003										
	1036				A1		2004	1119		HK	2001	-1071	99		2	0011	
PRIORIT	Y APP	LN.	INFO	.:								-1982				9980	
												-1985				.9981	
												-1991				.9990	
									_	WO	1999	-EP45	31		W 1	.9990	701
OTHER SO	JURCE	(S):			MARI	PAT	132:	78556	Ó								
GI																	

$$R^2$$
 ABAr R^4 R^3 1

AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylene, pyridinylene, pyrazinylene, pyrimidinylene, pyridazinylene; A = alkylene; B = O, S, CH2, CO, imino, SO, SO2; R2 = R1COX, etc.; R1 = alkoxy, amino, alkylamino, dialkylamino, etc.; X = cycloalkylene; R3 = H, alkyl; R4 = cyano, (substituted) amidino], were prepared Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride (multistep preparation

given) showed aPTT (partial thrombin time) ED200 = 0.12 μM .

IT 253430-83-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)

RN 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH} & \text{NH} \\ & \text{N} \\ & \text{C} \\ & \text{NH} \\ & \text{C} \\ & \text{NH} \\ & \text{NH} \\ & \text{C} \\ & \text{NH} \\ & \text{NH} \\ & \text{NH} \\ & \text{C} \\ & \text{NH} \\ & \text{$$

● HCl

IT 253431-62-8P 253431-65-1P 253796-87-1P 253797-00-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)

RN 253431-62-8 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH2 \\ \hline N & C & CH \\ \hline \end{array}$$

RN 253431-65-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{O} & \text{Me} \\ & & \\ & \text{N} & \text{C} & \text{C} \\ & & \text{H}_2 \text{N} \end{array} \qquad \begin{array}{c} \text{CN} \\ & \text{N} \\ & \text{Me} \end{array}$$

RN 253796-87-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:15648 HCAPLUS

DOCUMENT NUMBER: 132:64257

TITLE: Preparation of amidinophenylaminomethylbenzimidazoles

and related compounds as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke,

Henning; Nar, Herbert; Stassen, Jean Marie; Wienen,

Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 38 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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WO	2000				А3		2000											
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	RW:	ES,	FI,	FR,	GB,	GR,	SD,	IT,	LU,	MC	Ξ,	NL,	PT,					
	9949 7630	033	CM,	GA,	GN, A B2		ML, 2000 2003	0124		SI AU	۱, 19	TD, 99-	TG 4903:	3		1	9990	701
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TI D	2001				LV,	FI,		0001		TT D	2.0	001	1.40			1	0000	701
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	2002	5194:	29		T T T T3		2002	0702						06		1	9990	701
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	1095	025			Τ		2003	0430		PT	19	999-9	9327	65		1	9990	701
	2188	192			Т3		2003	0616		ES	19	999-9	9327	65		1	9990	701
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ZA	2000	0076	24		A		2001	0716		ZA	20	000-	7624			2	0001	219
MX	2000	PA12	819		A A		2004	0603		MX	20	000-1	PA12	819 0		2	0001	219
IN	2000	0 0 MM	760		A		2007	0615		ΙN	20	1-00	MN76	0		2	0001	221
ИО	2001	0000	28		A		2001	0103				01-2					0010	
BG	1051	11			A		2001	1231		ВG	20	01-1	1051	11		2	0010	103
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										DE	19	98-1	1985	7202		A 1	9981	211
										DE	19	99-1	1991:	2690		A 1	9990	320
										WO	19	99-1	EP45	31	,	W 1	9990	701
IER S	OURCE	(S):			MARE	PAT	132:	6425	7									

OTHER SOURCE(S): MARPAT 132:64257

AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylene, pyridinylene, etc.; A = alkylene; B = 0, S, CH2, CO, imino, sulfinyl, sulfonyl, etc.; R5 = R1COX; X = cycloalkylene; R1 = (substituted) (di)alkylamino, cycloalkyleneimino, morpholino, piperazino; R5 = H, alkyl; R7 = cyano, (substituted) amidino], were prepared Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride [prepared starting from <math>1-(4-chlorophenyl)-1-cyclopropanecarboxylic acid] showed aPTT (partial thrombin time) ED200 = 0.12 μ M.

IT 253430-83-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

RN 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

IT 253431-62-8P 253431-65-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

RN 253431-62-8 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH_2 \\ \hline N & C - CH \\ \hline \end{array} \begin{array}{c} N \\ N \end{array} \begin{array}{c} CH_2 - NH \\ \hline \end{array} \begin{array}{c} CN \\ N \end{array}$$

RN 253431-65-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{O} & \text{Me} \\ & &$$

=> FIL REGISTRY

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 51.46 230.03 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -4.00-4.00

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STRUCTURE FILE UPDATES: 13 FEB 2008 HIGHEST RN 1003293-96-6 DICTIONARY FILE UPDATES: 13 FEB 2008 HIGHEST RN 1003293-96-6

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

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```
chain nodes :
12  13  14  15
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  16  17  18
chain bonds :
4-13  9-12  12-13  12-15  13-14
ring bonds :
1-2  1-5  2-3  3-4  4-5  6-7  6-11  6-18  7-8  7-16  8-9  9-10  10-11  16-17  17-18

exact/norm bonds :
1-2  1-5  2-3  3-4  4-5  4-13  6-7  6-11  6-18  7-8  7-16  8-9  9-10  9-12  10-11
12-13  12-15  13-14  16-17  17-18
isolated ring systems :
containing 1 : 6 :
```

G1:0, S, N, NH

G2:CH2,CH,CF2,CF3

G3:CH2, CF2, CF3, SO2, SO3H, S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom

L6 STRUCTURE UPLOADED

=> d 16

L6 HAS NO ANSWERS

L6 STR

G1 O, S, N, NH

G2 CH2, CH, CF2, CF3

G3 CH2, CF2, CF3, SO2, SO3H, S

Structure attributes must be viewed using STN Express query preparation.

=> s 16

SAMPLE SEARCH INITIATED 11:06:33 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 9 TO 360 PROJECTED ANSWERS: 0 TO 0

0 SEA SSS SAM L6 L7

=> s 16 sss full

FULL SEARCH INITIATED 11:06:39 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 161 TO ITERATE

161 ITERATIONS 100.0% PROCESSED 0 ANSWERS

SEARCH TIME: 00.00.01

L8 0 SEA SSS FUL L6

=>

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chain nodes : 12 13 14 15

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 16 17 18

chain bonds :

4-13 9-12 12-13 12-15 13-14

ring bonds :

 $1 - 2 \quad 1 - 5 \quad 2 - 3 \quad 3 - 4 \quad 4 - 5 \quad 6 - 7 \quad 6 - 11 \quad 6 - 18 \quad 7 - 8 \quad 7 - 16 \quad 8 - 9 \quad 9 - 10 \quad 10 - 11 \quad 16 - 17 \quad 17 - 18$

exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 4-13 6-7 6-11 6-18 7-8 7-16 8-9 9-10 9-12 10-11 12-13 12-15 13-14 16-17 17-18

isolated ring systems :

containing 1 : 6 :

G1:0, S, N, NH

G2:CH2,CH,CF2,CF3

G3:CH2, CF2, CF3, SO2, SO3H, S

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom

L9 STRUCTURE UPLOADED

=> d 19 L9 HAS NO ANSWERS L9 STR

G1 O, S, N, NH

G2 CH2, CH, CF2, CF3

G3 CH2, CF2, CF3, SO2, SO3H, S

Structure attributes must be viewed using STN Express query preparation.

=> s 19

SAMPLE SEARCH INITIATED 11:11:29 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED

9 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE** 9 TO 360 PROJECTED ITERATIONS:

1 TO PROJECTED ANSWERS: 80

L10 1 SEA SSS SAM L9

=> s 19 sss full

FULL SEARCH INITIATED 11:11:36 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 161 TO ITERATE

100.0% PROCESSED 161 ITERATIONS 25 ANSWERS

SEARCH TIME: 00.00.01

L11 25 SEA SSS FUL L9

=> FIL HCAPLUS

COST IN U.S. DOLLARS SINCE FILE ENTRY SESSION 589.94 TOTAL FULL ESTIMATED COST 359.94

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY

CA SUBSCRIBER PRICE 0.00 -4.00

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FILE COVERS 1907 - 14 Feb 2008 VOL 148 ISS 7 FILE LAST UPDATED: 13 Feb 2008 (20080213/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 111

6 L11 L12

=> s 112 and py<=2003 23976331 PY<=2003

5 L12 AND PY<=2003 L13

=> s 112 and dipeptidyl peptidase

4914 DIPEPTIDYL 14336 PEPTIDASE

4930 PEPTIDASES

16580 PEPTIDASE

(PEPTIDASE OR PEPTIDASES)

3041 DIPEPTIDYL PEPTIDASE

(DIPEPTIDYL(W)PEPTIDASE)

L14 1 L12 AND DIPEPTIDYL PEPTIDASE

=> d 112 ibib abs hitstr tot

L12 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1156435 HCAPLUS

DOCUMENT NUMBER: 142:86665

TITLE: Cyclohexylglycine derivatives as dipeptidyl peptidase

IV inhibitors for the treatment or prevention of diabetes and other dipeptidyl peptidase IV-associated

diseases

INVENTOR(S): Edmondson, Scott D.; Mastracchio, Anthony; Parmee,

Emma R.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT						DATE				ICAT				D.	ATE	
	2004	1127	01		A2										2	0040	610
WC	2004	1127	01		A3		2005	0210									
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BΑ,	BB,	ВG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΑ,	NΙ,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TΤ,	TΖ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	${ m MZ}$,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GB,	GR,	ΗU,	ΙE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,
			TD,														
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CA	2527	806			A1		2004	1229		CA 2	2004 -	2527	806		2	0040	610
EP	1638	950			A2		2006	0329		EP 2	004-	7550	91		2	0040	510
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
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	1809										004-						
	2006															0040	510
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US	2007	0214	77		A1		2007	0125		US 2	005-	5607	71		2	0051	213
PRIORIT	Y APP	LN.	INFO	.:						US 2	003-	4792	46P		P 2	0030	617
										WO 2	004-	US18	718	•	W 2	0040	610
OTHER S	OURCE	(S):			MAR:	PAT	142:	8666	5								

AB The invention discloses cyclohexylglycine derivs. which are inhibitors of dipeptidyl peptidase IV which are useful in the treatment or prevention of diseases in which dipeptidyl peptidase IV is involved, such as diabetes and particularly type 2 diabetes. The invention also discloses pharmaceutical compns. comprising these compds. and the use of these compds. and compns. in the prevention or treatment of such diseases in which the dipeptidyl peptidase IV enzyme is involved. Preparation of compds. and intermediates is described.

T 815580-74-6 815580-74-6D, derivs. 815580-75-7
815580-75-7D, derivs. 815580-76-8 815580-76-8D
, derivs. 815580-77-9 815580-77-9D, derivs.
815580-80-1 815580-79-1D, derivs. 815580-80-4
815580-80-4D, derivs. 815580-87-1 815580-87-1D
, derivs. 815580-88-2 815580-88-2D, derivs.
815580-89-3 815580-89-3D, derivs. 815580-90-6
815580-90-6D, derivs. 815580-91-7 815580-91-7D
, derivs. 815580-92-8 815580-92-8D, derivs.
815580-93-9 815580-93-9D, derivs. 815580-94-0
815580-94-0D, derivs. 815580-95-1 815580-95-1D
, derivs. 815580-96-2 815580-96-2D, derivs.
815580-97-3 815580-97-3D, derivs. 815580-98-4
815580-98-4D, derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cyclohexylglycine derivs. as dipeptidyl peptidase IV inhibitors for treatment or prevention of diabetes and other dipeptidyl peptidase IV-associated diseases)

RN 815580-74-6 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]- (9CI) (CA INDEX NAME)

RN 815580-74-6 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]- (9CI) (CA INDEX NAME)

RN 815580-75-7 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{O} & \text{NH}_2 \\ & & \\ & \text{C-CH} \end{array}$$

RN 815580-75-7 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

RN 815580-76-8 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

RN 815580-76-8 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

RN 815580-77-9 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-77-9 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-79-1 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-79-1 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-80-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-

difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-80-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-87-1 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]- (9CI) (CA INDEX NAME)

RN 815580-87-1 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]- (9CI) (CA INDEX NAME)

RN 815580-88-2 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

815580-88-2 HCAPLUS RN

Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-CN (9CI) (CA INDEX NAME)

RN

815580-89-3 HCAPLUS
Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-CN difluoro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F & O & NH_2 \\ \hline N - C - CH & \\ \end{array}$$

815580-89-3 HCAPLUS RN

Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-CN difluoro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F & O & NH_2 \\ \hline N & C & CH \\ \end{array}$$

RN 815580-90-6 HCAPLUS

Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-CN (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-90-6 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-91-7 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-91-7 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-92-8 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-92-8 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-93-9 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH2 \\ \parallel & \parallel \\ C-CH & \parallel \\ N & N \end{array}$$

RN 815580-93-9 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH2 & H \\ \parallel & \parallel & N \\ C - CH & & \parallel & N \\ \end{array}$$

RN 815580-94-0 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

RN 815580-94-0 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

RN 815580-95-1 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

RN 815580-95-1 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)

RN 815580-96-2 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-96-2 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-97-3 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-97-3 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-98-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-

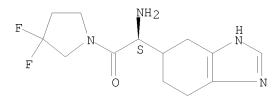
3,3-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-98-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2864 HCAPLUS

DOCUMENT NUMBER: 140:59935

TITLE: Preparation of crystalline (R)-2-(4-

amidinophenylaminomethyl)-1-methyl-5-(1-

(carboxymethylamino)-1(pyrrolidinocarbonyl)-ethyl)-

benzimidazole esters and/or salts for use as

antithrombotic agents

INVENTOR(S): Linz, Guenter; Sieger, Peter; Schreiner, Gunnar; Rall,

Werner; Schmid, Rolf

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma Gmbh & Co. Kg, Germany

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	. O <i>V</i>		D.	ATE	
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WO 2004	8000	18		A1		2003	1231	,	WO 2	003-	EP63	17		2	0030	616
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	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NΖ,	OM,
	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,
	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW					
RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,

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KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     DE 10227666
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                                 20040108
                                             DE 2002-10227666
                                                                     20020620
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                           A1
                                 20031231
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                                                                      20030616
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                                             AU 2003-237945
                           Α1
                                 20040106
                                                                     20030616
     EP 1529035
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                                 20050511
                                             EP 2003-735629
                                                                      20030616
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2006508037
                           Τ
                                 20060309
                                             JP 2004-514726
     US 2004010026
                           A1
                                 20040115
                                             US 2003-463033
                                                                      20030617
     US 7169934
                           В2
                                 20070130
     US 2007099974
                           Α1
                                 20070503
                                             US 2006-610187
                                                                     20061213
     US 7294721
                           В2
                                 20071113
PRIORITY APPLN. INFO.:
                                                                     20020620
                                             DE 2002-10227666
                                                                  Α
                                             US 2002-395188P
                                                                  Р
                                                                     20020711
                                             WO 2003-EP6317
                                                                     20030616
                                                                  W
                                             US 2003-463033
                                                                  A3 20030617
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OTHER SOURCE(S): MARPAT 140:59935

AB The invention relates to the crystalline forms of compds. (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)-ethyl)-benzimidazole and monohydrochloride thereof, to methods for the production thereof, and to their use as medicaments having an antithrombotic action (no data). Thus, (R)-2-(4-cyanophenylaminomethyl)-1-methyl-5-[1-amino-1-(pyrrolidineocarbonyl)-ethyl]benzimidazole was simultaneously N-alkylated and CN-reduced/aminated using BrCH2C(0)OCH2CH2CH3 in N-methylpyyolidinone, Pr acetate, and diisopropyethylamine; the resulting ester product was first isolated as the hydrochloride, and then as the 4-toluenesulfonic acid salt, which was deesterified to give the free base. The Et ester was similarly prepared Crystal structure data were given for the free base and the monohydrochloride forms.

IT 253797-00-1

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation and x-ray crystallog. structure of 2-(4-amidinophenylaminomethyl))-1-methyl-5-(1-(carboxymethylamino)benzimidaz ole esters and/or salts for use as antithrombotic agents)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2693 HCAPLUS

DOCUMENT NUMBER: 140:53413

TITLE: Benzimidazole derivatives for the treatment of

systemic inflammatory response syndrome

INVENTOR(S): Ries, Uwe; Wienen, Wolfgang; Schuly, Uwe

PATENT ASSIGNEE(S): Boehringer Ingelheim, Germany SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT :	NO.			KIN	D	DATE			APPI	LICAT	ION	NO.		D.	ATE	
WO.	2004	0003	 10		A1	_	2003	1231		 WO 2	 2003-:	 EP63	 18		2	0030	616
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	, KG,	ΚP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	, MW,	MX,	MZ,	ΝI,	NO,	NZ,	OM,
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	, SK,	SL,	ТJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW					
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	HU,	IE,	ΙT,	LU,	MC,	, NL,	PT,	RO,	SE,	SI,	SK,	TR,
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	1022				A1						2002-						
	2489																
	2003										2003-						
	1517									EP 2	2003-	7402	55		2	0030	616
EP	1517				В1		2007										
	R:										, IT,						
								,			TR,						
	2006										2004-						
	3650	38			T						2003-						
	2289															0030	
	2004		-		A1		2004	0205								0030	
PRIORIT	Y APP	LN.	INFO	.:							2002-						
											2002-					0020	
									,	WO 2	2003-	EP63	18	,	W 2	0030	616

OTHER SOURCE(S): MARPAT 140:53413

AB The invention discloses the use of benzimidazole derivs. for producing a medicament used for treating the systemic inflammatory response syndrome and particularly sepsis. Preparation of (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)ethyl]benzimidazol e hydrochloride is described.

IT 253797-00-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(benzimidazole derivs. for treatment of systemic inflammatory response syndrome)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ N & & & \\ & & & \\ N & & & \\ & & & \\ N & & & \\ & & & \\ N & & \\ & & & \\ N & & \\ & & \\ N & & \\ & & \\ N & & \\ \end{array}$$

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:467997 HCAPLUS

DOCUMENT NUMBER: 135:61338

TITLE: Preparation of 2-(4-amidinophenylaminomethyl)benzimida

zoles as antithrombotics

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke,

Henning; Nar, Herbert; Stassen, Jean Marie; Wienen,

Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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	 1996						2001	0628							1	9991	223
US	2001	0069	77		A1		2001	0705		US 2	000-	7351	59		2	0001	212
US	6451	832			В2		2002	0917									
CA	2393	916			A1		2001	0705		CA 2	000-	2393	916		2	0001	216
WO	2001	0478	96		A1		2001	0705		WO 2	000-	EP12	841		2	0001	216
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					MD,												
		SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
		YU,	ZA,	ZW													
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					FΙ,												
					CI,											·	·
EP	1244	636			A1		2002	1002		EP 2	000-	9833	42		2	0001	216
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
					LV,							•	•		·	•	,
JP	2003											5493	68		2	0001	216
	2002															0020	
	2003															0020	703
US	6593	355			В2		2003	0715									
	Y APP									DE 1	999-	1996	2329		A 1	9991	223
										US 2	000-	1751	63P		P 2	0000	107
											000-						
										WO 2	000-	EP12	841		W 2	0001	216
IDD C		/ C \ .			MADE	ידי ער	105.	(1))									-

OTHER SOURCE(S): MARPAT 135:61338

GΙ

Title compds. [I; R1 = alkyl, fluoroalkyl, pyrrolidinocarbonylalkyl, 2,5-dihydropyrrolocarbonylalkyl, aminoalkyl, etc., R2 = alkyl; R3 = carbamidoyl, cyano, (substituted) oxadiazolyl, etc.] and stereoisomerics thereof were prepared .Thus, (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(ethoxycarbonylmethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl] benzimidazole dihydrochloride in H2O was stirred with NaOH for 45 min. at room temperature followed by addition of HCl up to pH = 3.5 to give 100% (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl]benzimidazole dihydrochloride. Several I extended (doubled) the activated partial thromboplastin time (aPTT) with ED200 = 0.12-0.22 $\mu \rm M$.

IT 253797-00-1P 345957-57-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidinophenylaminomethylbenzimidazoles as antithrombotics)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 345957-57-5 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:34881 HCAPLUS

DOCUMENT NUMBER: 132:78556

TITLE: Preparation of amidinophenylaminomethylenzimidazoles

as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke,

Henning; Nar, Herbert; Stassen, Jean Marie; Wienen,

Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA:						KIND DATE			APPL	ICAT	ION :	NO.		DATE			
	2000 2000						2000 2000			WO 1	 999-	 EP45	31		1	9990	701
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NO 2001000028	A	20010103	ИО	2001-28		20010103
BG 105111	A	20011231	BG	2001-105111		20010103
HR 2001000007	A1	20011231	HR	2001-7		20010103
HR 2001000007	B1	20030430				
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PRIORITY APPLN. INFO.:			DE	1998-19829964	Α	19980704
			DE	1998-19857202	Α	19981211
			DE	1999-19912690	Α	19990320
			WO	1999-EP4531	W	19990701

OTHER SOURCE(S):

MARPAT 132:78556

GΙ

RN

$$R^2$$
 ABAr R^4 N

AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylene, pyridinylene, pyrazinylene, pyrimidinylene, pyridazinylene; A = alkylene; B = 0, S, CH2, CO, imino, SO, SO2; R2 = R1COX, etc.; R1 = alkoxy, amino, alkylamino, dialkylamino, etc.; X = cycloalkylene; R3 = H, alkyl; R4 = cyano, (substituted) amidino], were prepared Thus, $2-(4-\text{amidinophenylaminomethyl})-1-\text{methyl}-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride (multistep preparation given) showed aPTT (partial thrombin time) ED200 = 0.12 <math display="inline">\mu\text{M}$.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics) 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH} & \text{NH} \\ & \text{C-NH}_2 \\ & \text{N-C-CH} \\ & \text{N} \end{array}$$

HC1

ΙT 253431-62-8P 253431-65-1P 253796-87-1P 253797-00-1P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)

RN

253431-62-8 HCAPLUS
Pyrrolidine, 1-[amino[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-CN benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)

253431-65-1 HCAPLUS RN

Pyrrolidine, 1-[2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-CN benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
\text{O} & \text{Me} \\
\text{N} & \text{C} & \text{C} \\
\text{H}_2\text{N} & \text{N} & \text{CH}_2 - \text{NH}
\end{array}$$

RN 253796-87-1 HCAPLUS

Pyrrolidine, 1-[2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-CN yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:15648 HCAPLUS

DOCUMENT NUMBER: 132:64257

TITLE: Preparation of amidinophenylaminomethylbenzimidazoles

and related compounds as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke,

Henning; Nar, Herbert; Stassen, Jean Marie; Wienen,

Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 38 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND DA	ΓE	APPLICATION NO.	DATE
DE 19829964 US 6248770		000105	DE 1998-19829964 US 1999-338970	19980704 19990624
TW 248435	В 200	060201	TW 1999-88110926	19990629
CA 2337804 WO 2000001704			CA 1999-2337804 WO 1999-EP4531	19990701 19990701
WO 2000001704		000406		
				CH, CN, CU, CZ,
DE, DK, EE,	ES, FI, G	B, GD, GE,	GH, GM, HR, HU,	ID, IL, IN, IS,
JP, KE, KG,	KP, KR, KZ	Z, LC, LK,	LR, LS, LT, LU,	LV, MD, MG, MK,
MN, MW, MX,	NO, NZ, PI	L, PT, RO,	RU, SD, SE, SG,	SI, SK, SL, TJ,
TM, TR, TT,	UA, UG, UZ	Z, VN, YU,	ZA, ZW	
RW: GH, GM, KE,	LS, MW, SI	D, SL, SZ,	UG, ZW, AT, BE,	CH, CY, DE, DK,

				GB, GN,									SE,	BF,	ВJ,	CF,	CG,
AU	9949033	C11 ,	0117	A		2000							3		1	9990	701
_	763094					2003									_		, , ,
	9911826			A		2001			BR	199	99-1	1182	6		1	9990	701
EP	1095025			A2		2001	0502		ΕP	199	99-9	9327	65		1	9990	701
EP	1095025			В1		2002	1211										
	R: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, I	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
	•		LT,	LV,													
TR	20010014	8		Т2		2001						148				9990	
EE	20010000					2002			EE	200	01 - 9	9			1	9990	701
	4236			B1		2004				0.00		710			-	0000	
	20020007			A2		2002			HU	200)2-	710			1	9990	/ U I
	20020007 20025194			A3 T		2003			TD	200	20 1	5581	0.6		1	9990	701
	229511	29		T		2002						9327				9990 9990	
	1095025			T		2002.							65			9990	
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·-	509625			A		2003							25			9990	
	283744			В6		2003				200						9990	-
	20000076	24		A		2001									_	0001	
MX	2000PA12	819		А		2004	0603		MX	200	0 O -I	PA12	819		2	0001	219
IN	2000MN00	760		A		2007	0615		IN	200	1-0C	4N76	0		2	0001	221
NO	20010000	28		A		2001	0103			200						0010	103
	105111			A		2001									2	0010	103
	20010000			A1		2001			HR	200)1-	7			2	0010	103
	20010000			В1		2003											
	1036976			A1		2004	1119				-	-				0011	
PRIORITY	APPLN.	INFO	.:								-		9964			9980	-
													5P			9980	
											-		7202 2690			9981 9990	
													2690 31			9990 9990	
						400			WU	エッン	ורכי	1F45	JΙ	'	VV	ンツツU	/ U I

OTHER SOURCE(S): MARPAT 132:64257

GΙ

AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylene, pyridinylene, etc.; A = alkylene; B = 0, S, CH2, CO, imino, sulfinyl, sulfonyl, etc.; R5 = R1COX; X = cycloalkylene; R1 = (substituted) (di)alkylamino, cycloalkyleneimino, morpholino, piperazino; R5 = H, alkyl; R7 = cyano, (substituted) amidino], were prepared Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride [prepared starting from 1-(4-chlorophenyl)-1-cyclopropanecarboxylic acid] showed aPTT (partial thrombin time) ED200 = 0.12 $\mu \rm M$.

IT 253430-83-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

RN 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH} \\ & \text{N} \\ & \text{N} \\ & \text{C} \\ & \text{CH}_2 \\ & \text{N} \\ & \text{Me} \\ \end{array}$$

● HCl

IT 253431-62-8P 253431-65-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

RN 253431-62-8 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH2 \\ \hline N & C & CH \\ \hline \end{array}$$

RN 253431-65-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \text{Me} \\ \hline N & C - C \\ \hline H_2 N & N \\ \hline \end{array}$$

=> d 113 ibib abs hitstr tot

L13 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2864 HCAPLUS

DOCUMENT NUMBER: 140:59935

Preparation of crystalline (R)-2-(4-TITLE:

amidinophenylaminomethyl) -1-methyl-5-(1-

(carboxymethylamino)-1(pyrrolidinocarbonyl)-ethyl)benzimidazole esters and/or salts for use as

antithrombotic agents

Linz, Guenter; Sieger, Peter; Schreiner, Gunnar; Rall, INVENTOR(S):

Werner; Schmid, Rolf

Boehringer Ingelheim Pharma Gmbh & Co. Kg, Germany PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA.	PATENT NO.										ICAT							
WO	2004	0008	18													0030	616	<
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
							SC,											
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG	
DE	1022	7666			A1		2004	0108		DE 2	002-	1022	7666		2	0020	620	
CA	2485	545			A1		2003	1231		CA 2	003-	2485	545		2	0030	616	<
AU	2003	2379	45		A1		2004	0106		AU 2	003-	2379	45		2	0030	616	
EP	1529	035			A1		2005	0511		EP 2	003-	7356:	29		2	0030	616	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
	2006																	
US	2004	0100	26		A1		2004	0115		US 2	003-	4630	33		2	0030	617	
US	7169	934			В2		2007	0130										
US	2007	0999	74		A1		2007	0503		US 2	006-	6101	87		2	0061	213	
US	7294	721			В2		2007	1113										
RIORIT	Y APP	LN.	INFO	.:						DE 2	002-	1022	7666		A 2	0020	620	
										US 2	002-	3951	88P		P 2	0020	711	
										WO 2	003-	EP63:	17		W 2	0030	616	
									US 2	003-	4630	33		A3 2	0030	617		
TUED CO	SUIDCE (S).				MAD.	DЛT	1/10.	5003	5									

OTHER SOURCE(S): MARPAT 140:59935

The invention relates to the crystalline forms of compds. (R)-2-(4amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)-ethyl)-benzimidazole and monohydrochloride thereof, to methods for the production thereof, and to their use as medicaments having an antithrombotic action (no data). Thus, (R)-2-(4- $\verb|cyanopheny| a minomethy|) - 1 - methy| - 5 - [1 - a mino-1 - (pyrrolidine ocarbony|) - 1 - methy| - 1 - m$ ethyl]benzimidazole was simultaneously N-alkylated and CN-reduced/aminated

using BrCH2C(0)OCH2CH2CH3 in N-methylpyyolidinone, Pr acetate, and diisopropyethylamine; the resulting ester product was first isolated as the hydrochloride, and then as the 4-toluenesulfonic acid salt, which was deesterified to give the free base. The Et ester was similarly prepared Crystal structure data were given for the free base and the monohydrochloride forms.

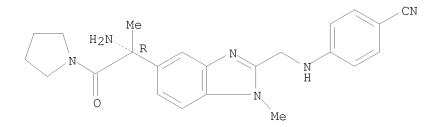
IT 253797-00-1

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation and x-ray crystallog. structure of 2-(4-amidinophenylaminomethyl))-1-methyl-5-(1-(carboxymethylamino)benzimidaz ole esters and/or salts for use as antithrombotic agents)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2693 HCAPLUS

DOCUMENT NUMBER: 140:53413

TITLE: Benzimidazole derivatives for the treatment of

systemic inflammatory response syndrome Ries, Uwe; Wienen, Wolfgang; Schuly, Uwe

PATENT ASSIGNEE(S): Boehringer Ingelheim, Germany

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PAI	PATENT NO.			KIND DATE		APPLICATION NO.						DATE					
WO	2004				A1	_	2003	 1231		 WO 2					2	0030	 616 <
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NΙ,	NO,	NZ,	OM,
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW					
	RW:	GH,	GM,	ΚE,	LS,	MW,	MΖ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	HU,	IE,	ΙT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GO,	GW,	ML,	MR,	NE,	SN,	TD,	TG

DE 10227 CA 24895 AU 20032 EP 15176	45 78945 37	A1 A1 A1 A1	20040108 20031231 20040106 20050330	DE 2002-10227668 CA 2003-2489545 AU 2003-278945 EP 2003-740255	20020620 20030616 < 20030616 20030616
	AT, BE, CH IE, SI, LT 14603 3 05 23975	•		GB, GR, IT, LI, LU, CY, AL, TR, BG, CZ, JP 2004-514727 AT 2003-740255 ES 2003-740255 US 2003-600055 DE 2002-10227668 US 2002-400166P	
				WO 2003-EP6318	W 20030616

OTHER SOURCE(S): MARPAT 140:53413

AB The invention discloses the use of benzimidazole derivs. for producing a medicament used for treating the systemic inflammatory response syndrome and particularly sepsis. Preparation of $(R)-2-(4-\text{amidinophenylaminomethyl})-1-\text{methyl}-5-[1-(\text{carboxymethylamino})-1-(\text{pyrrolidinocarbonyl})\,\text{ethyl}]\,\text{benzimidazol}$ e hydrochloride is described.

IT 253797-00-1P

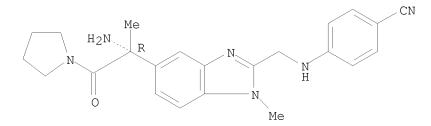
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(benzimidazole derivs. for treatment of systemic inflammatory response syndrome)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:467997 HCAPLUS

DOCUMENT NUMBER: 135:61338

TITLE: Preparation of 2-(4-amidinophenylaminomethyl)benzimida

zoles as antithrombotics

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke,

Henning; Nar, Herbert; Stassen, Jean Marie; Wienen,

Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT N	PATENT NO. DE 19962329							APPLICATION NO.					DATE			
DE 19962 US 20010 US 64518	06977		A1		2001	0705										
CA 23939								CA 2	000-	2393	916		2	0001	216	<
WO 20010	47896		A1		2001	0705		WO 2	000-	EP12	841		2	0001	216	<
		G, AL,														
	CR, C	U, CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	
	HU, I	D, IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	
	LU, L	V, MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	
	SD, S	E, SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,	
	YU, Z	A, ZW														
RW:	GH, G	M, KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
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	BJ, C	F, CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG			
EP 12446	36		A1		2002	1002		EP 2	000 -	9833	42		2	0001	216	<
R:	AT, B	E, CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
	IE, S	I, LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
JP 20035	19129		${ m T}$		2003	0617		JP 2	001-	5493	68		2	0001	216	<
MX 2002F														0020	621	<
US 20030								US 2	002-	1889	52		2	0020	703	<
US 65933	355		В2		2003	0715										
RIORITY APPL	JN. IN	FO.:						DE 1	999-	1996	2329		A 1	9991.	223	
								US 2	000 -	1751	63P		P 2	0000	107	
								US 2						0001		
								WO 2	000-	EP12	841		W 2	0001	216	
THER SOURCE (R SOURCE(S):			PAT	MARPAT 135:61338											

OTHER SOURCE(S): MARPAT 135:61338

AB Title compds. [I; R1 = alkyl, fluoroalkyl, pyrrolidinocarbonylalkyl, 2,5-dihydropyrrolocarbonylalkyl, aminoalkyl, etc., R2 = alkyl; R3 = carbamidoyl, cyano, (substituted) oxadiazolyl, etc.] and stereoisomerics thereof were prepared .Thus, (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(ethoxycarbonylmethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl] benzimidazole dihydrochloride in H2O was stirred with NaOH for 45 min. at room temperature followed by addition of HCl up to pH = 3.5 to give 100% (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl]benzimidazole dihydrochloride. Several I extended (doubled) the activated partial thromboplastin time (aPTT) with ED200 = 0.12-0.22 $\mu \rm M$.

IT 253797-00-1P 345957-57-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidinophenylaminomethylbenzimidazoles as antithrombotics)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 345957-57-5 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L13 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:34881 HCAPLUS

DOCUMENT NUMBER: 132:78556

TITLE: Preparation of amidinophenylaminomethylenzimidazoles

as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke,

Henning; Nar, Herbert; Stassen, Jean Marie; Wienen,

Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001704	A2	20000113	WO 1999-EP4531	19990701 <

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WO 2000001704
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OTHER SOURCE(S):
                        MARPAT 132:78556
GΙ
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$$R^2$$
 ABArR⁴ R^3 I

Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylene, pyridinylene, pyrazinylene, pyrimidinylene, pyridazinylene; A = alkylene; B = 0, S, CH2, CO, imino, SO, SO2; R2 = R1COX, etc.; R1 = alkoxy, amino, alkylamino, dialkylamino, etc.; X = cycloalkylene; R3 = H, alkyl; R4 = cyano, (substituted) amidino], were prepared Thus, $2-(4-\text{amidinophenylaminomethyl})-1-\text{methyl}-5-[1-(pyrrolidin-1-ylcarbonyl) cyclopropyl]benzimidazole hydrochloride (multistep preparation given) showed aPTT (partial thrombin time) ED200 = 0.12 <math display="inline">\mu\text{M}$.

02/14/2008

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)

RN 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH} \\ & \text{O} \\ & \text{N} \\ & \text{C} \\ & \text{CH}_2 \\ & \text{N} \\ & \text{Me} \end{array}$$

● HCl

IT 253431-62-8P 253431-65-1P 253796-87-1P 253797-00-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)

RN 253431-62-8 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH2 \\ \hline N & C & CH \\ \hline \end{array}$$

RN 253431-65-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & Me \\ \hline N & C - C \\ \hline H_2N & N \\ \end{array}$$

RN 253796-87-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L13 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:15648 HCAPLUS

DOCUMENT NUMBER: 132:64257

TITLE: Preparation of amidinophenylaminomethylbenzimidazoles

and related compounds as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke,

Henning; Nar, Herbert; Stassen, Jean Marie; Wienen,

Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 38 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19829964	A1	20000105	DE 1998-19829964	19980704 <
US 6248770	В1	20010619	US 1999-338970	19990624 <
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OTHER SOURCE(S):
                       MARPAT 132:64257
GΙ
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m N}{\underset{
m R}{\swarrow}}$ $_{
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m ABArR}^{
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AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylene, pyridinylene, etc.; A = alkylene; B = 0, S, CH2, CO, imino, sulfinyl, sulfonyl, etc.; R5 = R1COX; X = cycloalkylene; R1 = (substituted) (di)alkylamino, cycloalkyleneimino, morpholino, piperazino; R5 = H, alkyl; R7 = cyano, (substituted) amidino], were prepared Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride [prepared starting from

1-(4-chlorophenyl)-1-cyclopropanecarboxylic acid] showed aPTT (partial thrombin time) ED200 = 0.12 μM .

IT 253430-83-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

RN 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH} & \text{NH} \\ & \text{N} & \text{C} & \text{NH} \\ & \text{N} & \text{C} & \text{C} & \text{NH} \\ & & \text{N} & \text{C} & \text{NH} \\ & & \text{N} & \text{Me} \end{array}$$

● HCl

IT 253431-62-8P 253431-65-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

RN 253431-62-8 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH2 \\ \hline N & C - CH \\ \hline \end{array}$$

RN 253431-65-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{O} & \text{Me} \\ \hline \\ \text{N} & \text{C} & \text{C} \\ \hline \\ \text{H}_2 \text{N} & \text{N} \end{array}$$

=> d l14 ibib abs hitstr tot

L14 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1156435 HCAPLUS

DOCUMENT NUMBER: 142:86665

TITLE: Cyclohexylglycine derivatives as dipeptidyl

peptidase IV inhibitors for the treatment or prevention of diabetes and other dipeptidyl

peptidase IV-associated diseases

INVENTOR(S): Edmondson, Scott D.; Mastracchio, Anthony; Parmee,

Emma R.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE:

PCT Int. Appl., 54 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PRIO	PRIORITY APPLN. INFO.:										US 2	003-	4792	46P		P 2	0030	617
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OTHER SOURCE(S): MARPAT 142:86665

AB The invention discloses cyclohexylglycine derivs. which are inhibitors of dipeptidyl peptidase IV which are useful in the treatment or prevention of diseases in which dipeptidyl peptidase IV is involved, such as diabetes and particularly type 2 diabetes. The invention also discloses pharmaceutical compns. comprising these compds. and the use of these compds. and compns. in the prevention or treatment of such diseases in which the dipeptidyl peptidase IV enzyme is involved. Preparation of compds. and intermediates is described.

IT 815580-74-6 815580-74-6D, derivs. 815580-75-7

815580-74-6 815580-74-6D, derivs. 815580-75-7 815580-75-7D, derivs. 815580-76-8 815580-76-8D , derivs. 815580-77-9 815580-77-9D, derivs. 815580-79-1 815580-79-1D, derivs. 815580-80-4815580-80-4D, derivs. 815580-87-1 815580-87-1D , derivs. 815580-88-2 815580-88-2D, derivs. 815580-89-3 815580-89-3D, derivs. 815580-90-6 815580-90-6D, derivs. 815580-91-7 815580-91-7D , derivs. 815580-92-8 815580-92-8D, derivs. 815580-93-9 815580-93-9D, derivs. 815580-94-0 815580-94-0D, derivs. 815580-95-1 815580-95-1D , derivs. 815580-96-2 815580-96-2D, derivs. 815580-97-3 815580-97-3D, derivs. 815580-98-4 815580-98-4D, derivs. RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cyclohexylglycine derivs. as dipeptidyl peptidase IV inhibitors for treatment or prevention of diabetes and other dipeptidyl peptidase IV-associated diseases)

RN 815580-74-6 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]- (9CI)
(CA INDEX NAME)

RN 815580-74-6 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]- (9CI) (CA INDEX NAME)

RN 815580-75-7 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

RN 815580-75-7 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

RN 815580-76-8 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

RN 815580-76-8 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

RN 815580-77-9 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-77-9 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-79-1 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-79-1 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-80-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-

difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-80-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-87-1 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]- (9CI) (CA INDEX NAME)

RN 815580-87-1 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]- (9CI) (CA INDEX NAME)

RN 815580-88-2 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

815580-88-2 HCAPLUS RN

Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-CN (9CI) (CA INDEX NAME)

RN

815580-89-3 HCAPLUS
Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-CN difluoro- (9CI) (CA INDEX NAME)

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815580-89-3 HCAPLUS RN

Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-CN difluoro- (9CI) (CA INDEX NAME)

RN 815580-90-6 HCAPLUS

Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-CN (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-90-6 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-91-7 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-91-7 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-92-8 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-92-8 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-93-9 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

RN 815580-93-9 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & NH2 & H \\ \parallel & \parallel & \parallel \\ C - CH & & \parallel \\ \end{array}$$

RN 815580-94-0 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & O & NH2 & H \\ \hline N & C - CH & & \\ \end{array}$$

RN 815580-94-0 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

RN 815580-95-1 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

RN 815580-95-1 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)

RN 815580-96-2 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-96-2 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-97-3 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-97-3 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-98-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-

3,3-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 815580-98-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

=> log yCOST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 671.51 81.54 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -9.60-13.60

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